

REMARKS

Claims 1, 3 and 6 were rejected pursuant to 35 U.S.C. §102(a or e) as being anticipated by Lyon et al. (U.S. Application Publication No. 2004/0004905). Claim 2 was rejected pursuant to 35 U.S.C. §112, second paragraph, as indefinite, but was otherwise objected to as allowable if amended. Claims 7-8 were objected to as being allowable if amended into independent form. Claims 4-5, 9-11, and 22-23 were allowed. Applicants respectfully request reconsideration of the rejections of claims 1-3 and 6, including independent claim 1.

Regarding the amendment to Claim 2, the Examiner suggested a possible 35 U.S.C. §112, second paragraph concern. However, claim 1 recites "at least an ultrasound transmit, receive, or transmit and receive path." Claim 2 was amended to recite "the at least the transmit and receive path." Claim 1 includes three options. Claim 2 defines one of the options. The use of "at least" from claim 1 is included in claim 2. Claim 2 is clear and definite.

Claim 5 is amended to correct a punctuation error.

Independent claim 1 recites an ultrasound transmit and/or receive path connected with a beamformer, and a clipping diode and switch separate from the path. Lyon et al. do not disclose these limitations.

Lyon et al. disclose a time-of-flight ranging system (abstract). A single transducer is shown (Fig. 1). The single transducer allows determination at a distance (paragraph 2). Use of "a" transducer is noted (paragraph 3). To beamform, multiple signals from multiple transducers operated substantially simultaneously are used. A beam is not formed using a single transducer. Lyons et al. uses a single transducer element, so the transmit path is not part of a beamformer. There is no disclosure of a beamformer connected with the ultrasound path.

In the Advisory Action, the Examiner noted that "Applicant's argument that the beamformer limitation of claim 1 requires multiple transducer elements is not persuasive since no such disclosure was made in the specification which only disclosed the use of multiple transducer elements for a phased array beamformer in paragraph 23 and not for a generic beamformer as claimed. First, the concept of beamforming is a phased array concept.

However, for clarity without narrowing the claim, claim 1 has been amended to recite a phased array beamformer.

In Lyons et al., the diodes 34 separate transmit and receive signals (paragraph 21). The diode network 34 prevents high transmit voltage from passing to the low voltage receive path and route low voltage receive signals on the receive path, not the transmit path. To perform this transmit/receive switching, the diodes are part of both the transmit and receive paths. Interpreting the transmit path as the "path" of claim 1 still results in the transmit/receive diode network being in the "path." Figure 1 clearly shows this arrangement, so Lyon et al. specify the common use of diodes contrary to the Examiner's assertion in the Advisory Action. Lyon et al. are using a common arrangement of diodes for transmit/receive switching. Applicant teaches and claims a different use and corresponding arrangement of diodes. Mere connection by a conductor or wire is not being used to distinguish over Lyon et al. The actual arrangement or circuit distinguishes over Lyon et al. The diodes are not separate from the path as required by claim 1.

Dependent claims 3 and 6 depend from independent claim 1, so are allowable for the same reasons. Further limitations distinguish from the cited references. Claim 6 recites a double pole relay. Lyon et al. do not disclose a double pole relay.

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CONCLUSION:

Applicants respectfully submit that all of the pending claims are in condition for allowance and seeks early allowance thereof. If for any reason, the Examiner is unable to allow the application but believes that an interview would be helpful to resolve any issues, he is respectfully requested to call the undersigned at (650) 943-7554 or Craig Summerfield at (312) 321-4726.

PLEASE MAIL CORRESPONDENCE TO: Respectfully submitted,

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